

Listing and Amendments to the Claims

This listing of claims will replace the claims that were published in the PCT Application and annexed to the International Preliminary Report on Patentability:

1. (previously presented) A method for run-length encoding of a data stream, the data stream comprising bitmap formatted subtitle or menu data for video presentation on a display, wherein the subtitle or menu data include graphics or text or both, comprising the steps of
 - defining a preferred color;
 - defining a range of run-lengths;
 - encoding pixels of the preferred color to first code words with two or three bytes, wherein said first code words comprise a run-length value, and wherein the run-length value comprised in first code words having three bytes exceeds said defined range and may exceed the width of the display;
 - encoding pixels of another than the preferred color to second code words with one, three or four bytes, wherein the second code words comprise a color value, and wherein second code words having three or four bytes comprise a run-length value, and wherein the run-length value comprised in second code words having four bytes exceeds said defined range and may exceed the width of the display.
2. (previously presented) Method according to claim 1, wherein said color values and the preferred color are mapped with a look-up table to display colors.
3. (currently amended) Method according to claim 1 ~~or 2~~, wherein the shortest redundant code word is used for line synchronization.

4. (previously presented) Method for run-length decoding of an encoded data stream for a video presentation on a display, comprising the steps of
 - determining the first byte of a code word;
 - if said first byte has not a defined first value, decoding said first byte to a single pixel having individual color defined by the value of said first byte, the color being other than a defined first color;
 - if said first byte has the defined first value, determining the first and second bit of the following byte being the second byte;
 - if the first and second bit of the second byte have a first value, decoding the remaining bits of the second byte to a sequence of pixels of the defined first color, wherein said remaining bits of the second byte define the sequence length;
 - if the first and second bit of the second byte have a second value, decoding said remaining bits of the second byte together with the following third byte to a sequence of pixels of the defined first color, wherein said remaining bits of the second byte and said third byte define the sequence length, and wherein said sequence length may exceed the display width;
 - if the first and second bit of the second byte have a third value, decoding said remaining bits of the second byte together with the third byte to a sequence of pixels, wherein said remaining bits of the second byte define the sequence length and the third byte defines the pixels color; and
 - if the first and second bit of the second byte have a fourth value, decoding said remaining bits of the second byte together with the third and a following fourth byte, wherein said remaining bits of the second byte and the third byte define the sequence length and the fourth byte defines the pixel color, and wherein said sequence length may exceed the display width.
5. (currently amended) Method according to ~~the previous claim~~ claim 4, wherein said defining of a pixel color from the first, third or fourth byte and from said first value comprises using a look-up table.

6. (currently amended) Method according to claim 4 ~~or 5~~, wherein the encoded data stream for a video presentation is a separate layer overlaying other video data on the display, further comprising the step of selecting a portion of said separate layer for displaying.
7. (previously presented) An apparatus for run-length encoding of a data stream comprising bitmap formatted subtitle or menu data for a visual presentation on a display, wherein the subtitle or menu data include graphics or text or both, comprising
 - means for defining a first color;
 - means for defining a range of run-lengths;
 - means for encoding pixels of the first color to first code words with two or three bytes, wherein said first code words comprise a run-length value, and wherein the run-length value comprised in first code words having three bytes exceeds said defined range and may exceed the width of the display;
 - means for encoding pixels of another than the first color to second code words with one, three or four bytes, wherein the second code words comprise a color value, and wherein second code words having three or four bytes comprise a run-length value, and wherein the run-length value comprised in second code words having four bytes exceeds said defined range and may exceed the width of the display.
8. (previously presented) An apparatus for run-length decoding of an encoded data stream containing compressed bitmap formatted subtitle or menu data for video application, comprising
 - means for determining code word length, wherein the first byte of a code word is evaluated, and wherein if said first byte has another than a defined first value then said code word length is determined to be one byte, and otherwise the first and second bit of the following, second byte are evaluated, and depending on said first and second bit the code word length is determined to be two, three or four bytes respectively;

- means for decoding code words determined to be one byte long to single pixels having a color defined by said one byte, the color being different from a defined first color;
 - means for decoding code words determined to be two bytes long to sequences of pixels of the defined first color, wherein the sequence length is defined by the remaining bits of the second byte of the code word;
 - means for decoding code words determined to be three bytes long either to sequences of pixels of the defined first color, wherein the sequence length may exceed the width of the video display and is defined by the third byte and the remaining bits of the second byte, or to sequences of pixels of equal color other than the defined first color, wherein the sequence length is defined by the remaining bits of the second byte; and
 - means for decoding code words determined to be four bytes long to sequences of pixels of equal color other than the defined first color, wherein the sequence length may exceed the width of the video display.
9. (currently amended) Apparatus according to the ~~previous claim~~ claim 8, wherein the means for decoding code words having two bytes that include a sequence length of zero as a sync code word, further comprising means for decoding said sync code word to an end-of-line indication.
10. (currently amended) Apparatus according to ~~any of the claims 7-9~~ claim 7, further comprising look-up table means for mapping between said color values, including said defined first color, and display colors.
11. (currently amended) Apparatus according to ~~any of claims 7-10~~ claim 7, wherein said encoded data stream is distributed to multiple transport packets.
12. (currently amended) Disc containing data encoded according to ~~any of the claims 1-3~~ claim 1.